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(54) Flip chip package for micromachined semiconductors

(57) A hermetic multilayered ceramic semiconductor package for micromachined semiconductor devices. A low temperature co-fired ceramic assembly has a cavity and a top and bottom surface. Several vias extend between the top and bottom surfaces and several solder spheres are located on the top surface and are electrically connected to the vias. A micromachined semiconductor device abuts the bottom surface and covers the cavity such that a movable portion of the micromachined semiconductor device is unconstrained to move within the cavity. Solder is used to connect the vias to solder bumps on the semiconductor device. A seal ring is located between the micromachined semiconductor device and the ceramic assembly for hermetically sealing the micromachined semiconductor device.

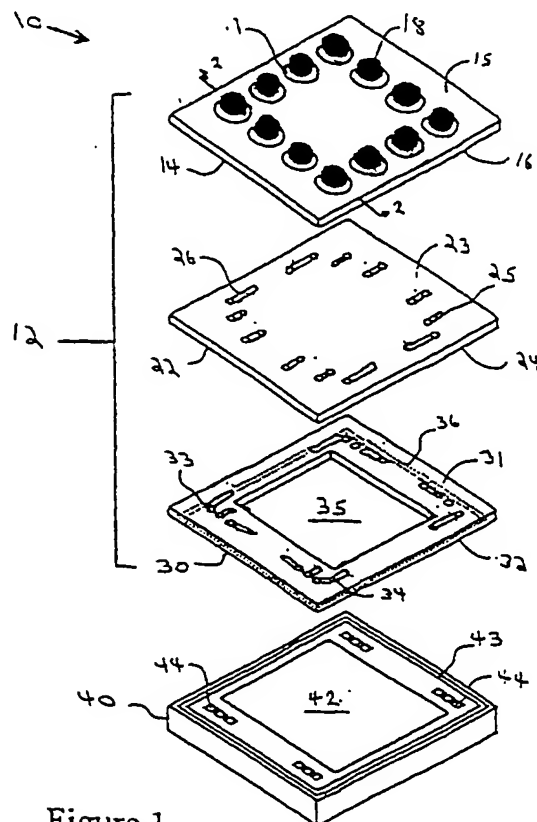


Figure 1



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 00 30 3286

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A		10	
X	US 5 898 218 A (HIROSE SHINICHI ET AL) 27 April 1999 (1999-04-27) * figures 1-3 * * column 2, line 10 - column 3, line 31 * * column 5, line 59 - column 6, line 29 *	10	
Y		2,3,5-9	
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The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 22 July 2002	Examiner Polesello, P
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

**ANNEX TO THE EUROPEAN SEARCH REPORT
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